

3515 U.S. PTO



0985/97

PATENT APPLICATION TRANSMITTAL COVER

Assistant Commissioner of Patents
Washington, D.C. 20231

Transmitted herewith for filing in the patent application of:

Michael J. Sullivan

For: IMPROVED MULTI-LAYER GOLF BALL

Enclosed are:

- [XX] 1 sheets of drawing(s).
- [] an assignment of an invention to _____
- [] a certified copy of a _____ application.
- [] associate power of attorney.

CLAIMS AS FILED

FOR	NO. FILED	NO. EXTRA	RATE	FEE
TOTAL CLAIMS	8 - 20 =	-	[] \$22 LARGE [] \$11 SMALL	\$ 0.00
INDEPENDENT CLAIMS	1 - 3 =	-	[] \$80 LARGE [] \$40 SMALL	\$ 0.00
BASIC FEE [XX] LARGE ENTITY \$770 [XX] SMALL ENTITY \$385				
TOTAL FILING FEE \$				770.00

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September 5, 1997
Date

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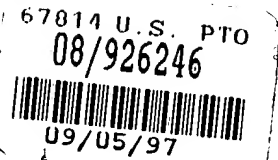
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Christina Calabrese

(TYPED OR PRINTED NAME OF SENDER)

Christina Calabrese
(SIGNATURE)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



IN RE APPLICATION OF : Michael J. Sullivan
FOR : IMPROVED MULTI-LAYER GOLF BALL
FILED : Herewith
U.S. SERIAL NO. : Divisional of U.S. Serial
No. 08/714,661
PREVIOUS EXAMINER : M. Graham/G. Marlo
ATTORNEY DOCKET NO. : P-3637-F1-D1-D2/SLD 2 035-1-2-2
Cleveland, Ohio 44114-2518

REQUEST FOR INTERFERENCE UNDER 37 C.F.R. §1.607

Commissioner of Patents
and Trademarks
Washington, DC 20231

Dear Sir:

473/373
1#R 378

Applicant requests that an interference be declared between the above identified application and U.S. Patent No. 5,553,852 ("Higuchi et al.") pursuant to the provisions of 37 C.F.R. §1.607. The Higuchi et al. '852 patent was issued by the U.S. Patent and Trademark Office on September 10, 1996 (less than one (1) year ago) and is entitled "Three-Piece Solid Golf Ball".

Newly presented claims 1-8 cover the same patentable invention as claims 1-8 of the Higuchi et al. '852 patent. It is believed that an interference should be declared on the following proposed count:

1. A three piece solid golf ball comprising;
 - a) a center core, an intermediate layer, and a cover enclosing the core through the intermediate layer;

b) said center core having a diameter of at least 29 mm (1.1417 inches) and a specific gravity of less than 1.4;

c) said intermediate layer having a thickness of at least 1 mm (0.03937 inches), a specific gravity of less than 1.2, and a hardness of at least 85 on JIS C (Shore C) scale, the specific gravity of said intermediate layer being lower than the specific gravity of said center core; and

d) said cover having a thickness of 1 to 3 mm (0.03937 to 0.1182 inches) and being softer than said intermediate layer.

Claims 1-8 of the Higuchi et al. '852 patent and claims 1-8 of the present application correspond to the proposed count.

The terms of application claims corresponding to the proposed count are supported in Applicant's specification as follows:

Terms in the Claims	Supporting Language in Specification
1. A three piece solid golf ball comprising;	The entire application.
a center core, an intermediate layer, and a cover enclosing the core through the intermediate layer,	Figures 1-2 Pages 35-47 of the application.
said center core having a diameter of at least 29 mm (1.1417 inches) and a specific gravity of less than 1.4,	On page 35, the cores are preferably about 1.545 inches in size (39.243 mm). Moreover, the core in the example on page 39 shows a diameter of 1.545 inches (39.243 mm) and a weight of 36.5 grams. This results in a specific gravity of 1.154 (i.e. 36.5 gr./31.642 c.c.).

said intermediate layer having a thickness of at least 1 mm (0.03937 inches), a specific gravity of less than 1.2, and a hardness of at least 85 on JIS C (Shore C) scale, the specific gravity of said intermediate layer being lower than the specific gravity of said center core, and

Page 36 of the application indicates that the intermediate or inner cover layer which is molded over the core is about 0.100 inches (2.54 mm) to about 0.010 inches (.254 mm) in thickness. In the examples, an intermediate or inner cover layer is taught having a thickness of 1.7 mm (0.0675") (see page 39, line 12); a specific gravity of less than 1.2 (Sample E of Table 7 is 50:50 Iotek 7030 and Iotek 8000 which have specific gravities of 0.96 and 0.954, respectively) (pages 28 and 29); and a hardness of 96 on the Shore C scale (page 42, line 7). Similarly, while the data on Iotek 959 and Iotek 960 shown on page 15 does not list the specific gravity, the attached sheet shows the specific gravities of ionomers as being .920-.990". This is less than 1.2 specific gravity claimed. Moreover, the specific gravity of the intermediate or inner cover layer (.920-.990) is lower than the specific gravity of the core (1.154). Furthermore, on page 42, line 7, a 50/50 blend of Iotek 959/960 has a Shore C hardness of 98. This "at least 85" as claimed.

said cover having a thickness of 1 to 3 mm (0.03937 to 0.1182 inches) and being softer than said intermediate layer.

The outer cover is 0.254-1.27 mm (0.01-0.05") (page 36, lines 7-8); there is a teaching at page 1, lines 1-3, that the cover is softer than the inner or intermediate layer. Additionally, soft cover materials are disclosed on pages 24-35 of the application.

apps
Unit
Not met

2. The golf ball of claim 1 wherein said intermediate layer is formed of a high repulsion ionomer resin base composition.	All of the examples of the intermediate or inner cover layers are ionomer resins that give high resilience to the golf ball.
3. The golf ball of claim 1 wherein said center core has a hardness of 45 to 80 on JIS C scale and said cover has a hardness of 50 to 85 on JIS C scale.	No specific hardness range of the cores and covers are specified. However, the cores and covers are believed to inherently fall within the ranges specified. NM
4. The golf ball of claim 1 wherein said center core is comprised of a polybutadiene base rubber composition.	Page 35, and formulations of the polybutadiene cores in the examples, page 39.
5. The golf ball of claim 1 wherein the diameter of said center core is in the range of 29-37 mm.	If the maximum intermediate or inner cover layer and outer cover thickness are used, then the core of a 1.68" ball is 1.38 inches (35.052 mm). NM
6. The golf ball of claim 1 wherein a difference in the specific gravity between the center core and the intermediate layer is in the range of 0.1 to 0.5.	Specific gravity of the core (1.154) less the specific gravity of the intermediate or inner cover layer (.920 - .990) equals .234 - .164. NM
7. The golf ball of claim 1 wherein the specific gravity of said intermediate layer is in the range of 0.9 to 1.0.	The ionomers used in the intermediate or inner cover layer fall within the range of 0.9 - 1.0 specific gravity. NM
8. The golf ball of claim 1 wherein the hardness of said intermediate layer is in the range of 85 - 100 on JIS C.	The ionomers and the intermediate layers formed thereof fall within 59-72 Shore D (i.e., 85-100 JIS-C). See also Table 7, pages 41-42, intermediate cover Shore C of 96-98.

An interference is believed to be necessary because the same invention is being claimed in the Higuchi et al. '852 patent and the present application and priority can not be determined without an interference.

In this regard, the present application is a divisional of application serial number 08/714,661 filed on September 16, 1996 which, in turn, is a divisional of application serial number 08/562,540 filed on November 20, 1995, which is a continuation of application serial number 08/070,510 filed on June 1, 1993. Consequently, the effective filing date to which Applicant is entitled for the subject matter of the copied claims is believed to be June 1, 1993.

Since Applicant's effective filing date is earlier than the effective filing date of the Higuchi et al. '852 patent, the new cited claims are patentable over the cited reference. Accompanying this Request is a Declaration complying with 37 C.F.R. §1.608.

In view of the above, the declaration of an interference is requested in order that the Applicant may have the opportunity to establish his priority rights.

Respectfully submitted,

FAY, SHARPE, BEALL,
FAGAN, MINNICH & MCKEE

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Date of Deposit September 5, 1997
I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

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